

Task

Subject: Dan Mahar, NWCAA? 129 applicability
Start Date: 12/26/2013
Due Date: 1/2/2014

Status: Completed
Percent Complete: 1

Total Work: 0
Actual Work: 0

Owner: Valdez, Heather

2-19

Hi Dan, Here is some further information relating to the potential for processing the sludge so that it could pass a non-waste determination under Part 241 (Non-Hazardous Secondary Materials)

It may be helpful to look at the processing component in these guidance letters issued by headquarters.

<http://www.epa.gov/epawaste/nonhaz/define/pdfs/dtee-biosolids.pdf>

<http://www.epa.gov/epawaste/nonhaz/define/pdfs/delhi-charter.pdf>

As we just discussed, once you can think about this, headquarters would be glad to schedule a call to discuss the project further. And we can also talk further about my making a little visit to see the facility.

Heather Valdez

1-31

Thanks Amy, That is good that you found the old FR notice. I have some further info from the local agency that forms part of the basis for why he is thinking that NSPS O would apply to the Janicki operation. See adi attachment he refers to.



Janicki Omni
Processor - Draft...



adi-nsps-990000...

Hi Heather –

One of my questions to you (EPA) on the Janicki project was related to the applicability of 40 CFR 60 Subpart O and the exemption in 40 CFR 60 Subpart CCCC for sewage sludge incinerators that are subject to 40 CFR 60 Subpart O.

Based on the attached ADI Memo 9900008, sewage sludge incinerators which incinerate sewage sludge from the wastewater treatment operations located at another facility and own by a private company are subject to 40 CFR 60 Subpart O. This is the case for Janicki's proposed incinerator. Thus, Janicki is subject to 40 CFR 60 Subpart O, and may exercise the exemption from 40 CFR 60 Subpart CCCC expressed in:

§60.2020 What combustion units are exempt from this subpart?

(m) Sewage treatment plants. Incineration units regulated under subpart O of this part (Standards of Performance for Sewage Treatment Plants)

This information is being provided in support of my January 10, 2014 request (attached) for review of my draft applicability determination for this project. I will call you as a follow-up to this email to discuss.

Sincerely,

Dan Mahar
Northwest Clean Air Agency
360-419-6846
www.nwcleanair.org

From: Hambrick, Amy
Sent: Wednesday, January 29, 2014 2:05 PM
To: Valdez, Heather; Gordon, Michael; Gallagher, Shirin; Mia, Marcia
Cc: Jones, Toni; Spells, Charlene
Subject: RE: Janicki Omni Processor - Draft Federal Reg Applicability Analysis

Hi Heather,

Thanks for the additional information. This looks like a worthwhile project. Let's discuss further. It seems you are working with the state of WA on this? Does R10 and the state plan to have a call with the facility? I hope so as it would seem to be helpful to get some more info.

Questions the facility would need to answer in order to provide some informal guidance: (Note option of asking them to submit formal AD...)

Ex. 5 Deliberative Process (DP)

Some of my initial thoughts: (I am sure I am probably repeating some things you've already considered...)

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Ex. 5 Deliberative Process (DP)

Amy Hambrick

Heather Valdez

1-27

Hi, good morning, I have some more detailed information about the new sewage sludge incinerator project in WA.

Amy, I'll let you think about this, talk it over, then I'll be curious to see what you think.
Shirin said she might have some time to think about the applicability for NSPS subpart O.

Marcia, not sure if you have seen this question yet, I would love to hear what you know about, or think about, applicability to NSPS Subpart O and how that interfaces with the exemption that you see in CISWI related to that, when considering a unit that would burn municipal sewage sludge, but located at a commercial, industrial, or institutional facility, not a municipal waste water treatment plant.

We can discuss this on the next 129 call too.

Heather Valdez

1-24

Heather –

Please find the Janicki project description attached with the caveat that they are interested in co-combusting clean wood and municipal sewage sludge in this phase of permitting with NWCAA.



Section 1 - Project
Description.pdf

Dan Mahar

1-24

Hi Shirin, how are you? I just spoke to Amy Hambrick (SSI and HMIWI rule lead)

Ex. 5 Attorney Client (AC)

Thanks!

Heather Valdez

1-24

Hi Dan, how are you? So I have some folks at head quarters who are looking and thinking about this. We would like to have some more details on the unit. Can you provide us with a more thorough description of exactly what is going on, what type of combustion technology is the unit, where it is occurring, the scale, pictures or flow diagrams would be nice, basically anything you have that can give us a better picture of what is occurring on the ground would be helpful.

I heard some snow maybe in the forecast, we'll see. Anyway, I get to go up to AK in a week though, so very stoked.

Thanks Dan

Heather Valdez

1-17

Hi Dan, I got your voice mail. Sorry but I am just getting to looking at this, I am glad you reminded me, I have too much going on!

A couple of questions have occurred to me that I need some more understanding about for how you have the analysis constructed. I want to make sure I present the possible scenario accurately for our internal discussions.

For the OSWI exemption, with the limiting the combustion of municipal solid waste to 30 percent

It sounds to me you have two material streams:

1. Collected domestic sewage sludge, and
2. **Refused derived from scrap material generated at their reinforced plastics manufacturing plant**

Have I described those correctly? Are there other ideas for the number 2 category?

Which of these materials are you considering to be the MSW? That material that is the MSW would be limited to no more than 30%, so it sounds to me that you have the **Refused derived from scrap material generated at their reinforced plastics manufacturing plant**

in the MSW category, and then are you would have to be saying that the domestic sewage sludge is not MSW, right, thus the unit is exempted out of being a VSMSW.

With the definition under OSWI, it is unclear to me whether either of the material streams are or are not MSW. I am wondering if the term industrial process wastes eliminates the **Refused derived from scrap material generated at their reinforced plastics manufacturing plant**

From being MSW. But the definition does allow for material collected from industrial sources. Also I do not see domestic sewage sludge clearly addressed in the definition of MSW under OSWI, but I am wondering if collected from the general public and from residential, commercial, institutional, and industrial sources could cover it.

Municipal solid waste means refuse (and refuse-derived fuel) collected from the general public and from residential, commercial, institutional, and industrial sources consisting of paper, wood, yard wastes, food wastes, plastics, leather, rubber, and other combustible materials and non-combustible materials such as metal, glass and rock, provided that: (1) the term does not include industrial process wastes or medical wastes that are segregated from such other wastes; and (2) an incineration unit shall not be considered to be combusting municipal solid waste for purposes of this subpart if it combusts a fuel feed stream, 30 percent or less of the weight of which is comprised, in aggregate, of municipal solid waste, as determined by §60.2887(b).

Also, for the **Refused derived from scrap material generated at their reinforced plastics manufacturing plant** material to meet the definition for MSW, how is the term collected from met, if the material is generated **at their reinforced plastics manufacturing plant?**

So if you have further thoughts on those ideas please share.

Haven't gotten up there to the pow yet unfortunately! Pretty awful. Maybe this long weekend, but likely just to hike up a bit and let the kids goof around, nothing real for me on tap. We don't even have passes this year (which I sure am glad for at this point, glad we didn't put that money out for nothing) And now I would not want to pay full price for what they have to offer at this point. Maybe we will get a spring pass or something.

Heather Valdez

1-17

Hi 129 team, I have a brain teaser for your Friday afternoon, I should have elevated this earlier but it came in around Christmas, not as a formal request, but, as an email from the local agency, and got lost in the shuffle of my email over this last busy month. Now the company urgently would like an answer from the local agency and I am just getting to looking at it.

This company and the local agency thinks they have found a path through the maze of exemptions that still exists, according to their analysis, to get out of 129. They would combust, at a commercial/industrial location, a mix of domestic sewage sludge they will collect mixed with 30% of what might be either municipal solid waste or commercial/industrial waste they may generate or collect.

Please also see the full analysis in the attachment developed by the local agency who is in support of finding a way for the project to be exempt and has currently permitted them to use the unit with clean wood feedstock as they experiment with it. The project has funding backing for research purposes from the Bill and Melinda Gates Foundation with the hope of developing for use in 3rd world applications for waste to energy. And now they want to start experimenting with their other planned materials asap.

The question boils down to
Specifically,

1. Is the unit exempt from 40 CFR 60 Subpart CCCC because it is subject to Subpart O, and
2. Is the unit exempt from 40 CFR 60 Subpart EEEE if the NWCAA issues a federally enforceable permit that limits refused derived fuel to less than 30% by weight.

I think a couple of the questions that come to my mind after looking at this are

Would CISWI be Not applicable because the Janicki Omni Processor is an incineration unit regulated under 40 CFR 60 Subpart O. [§60.2020]

§60.2020 What combustion units are exempt from this subpart?

(m) Sewage treatment plants. Incineration units regulated under subpart O of this part (Standards of Performance for Sewage Treatment Plants

Would this exemption (m) be an automatic out from CISWI, for any applicability to NSPS O, would it still hold if in addition to the domestic sewage sludge combustion, triggering NSPS O applicability, they also combusted the up to 30% MSW that NSPS Subpart O and Part 503 Subpart E allows?

- **40 CFR 60 Subpart O §60.105(a)** The affected facility is each incinerator that combusts wastes containing more than 10 percent sewage sludge [in other words applies as long as at least 10% sewage sludge burned, so under NSPS Subpart O can be up to 90% anything else -hv] (dry basis) produced by municipal sewage treatment plants, or each incinerator that charges more than 1000 kg (2205 lb) per day municipal sewage sludge (dry basis). [Also applies no matter what the percentage is as long as this much is burned -hv]
- Subpart E allows up to 30% by weight of the feed to the incinerator to be auxiliary fuel that includes either traditions such as propane, and municipal solid waste. [503.419(b) and 503.6(c)]

§503.41 Special definitions.

(b) Auxiliary fuel is fuel used to augment the fuel value of sewage sludge. This includes, but is not limited to, natural gas, fuel oil, coal, gas generated during anaerobic digestion of sewage sludge, **and municipal solid waste (not to exceed 30 percent)** of the dry weight of sewage sludge and auxiliary fuel together)

Then if they do not get out of CISWI that way because of this other material, would they get out another way through applicability to OSWI as a VSMWC, even if within OSWI they got out through an exemption?

CISWI exemption §60.2020 (o) Other solid waste incineration units. Incineration units that are subject to subpart EEEE of this part (Standards of Performance for Other Solid Waste Incineration Units) or subpart FFFF of this part (Emission Guidelines and Compliance Times for Other Solid Waste Incineration Units).

OSWI exemption §60.2887 (b) Co-fired combustors. Your unit, that would otherwise be considered a very small municipal waste combustion unit, is excluded if it meets the five requirements specified in paragraphs (b)(1) through (5) of this section.

(1) The unit has a Federally enforceable permit limiting the combustion of municipal solid waste to 30 percent of the total fuel input by weight.

Would they be a VSMWC to begin with:

Very small municipal waste combustion unit means any municipal waste combustion unit that has the capacity to combust less than 35 tons per day of municipal solid waste or refuse-derived fuel, as determined by the calculations in §60.2975.

Municipal waste combustion unit means, for the purpose of this subpart and subpart FFFF of this part, any setting or equipment that combusts municipal solid waste (as defined in this subpart) including, but not limited to, field-erected, modular, cyclonic burn barrel, and custom built incineration units (with or without energy recovery) operating with starved or excess air, boilers, furnaces, pyrolysis/combustion units, and air curtain incinerators (except those air curtain incinerators listed in §60.2888(b)).

Municipal solid waste means refuse (and refuse-derived fuel) collected from the general public and from residential, commercial, institutional, and industrial sources consisting of paper, wood, yard wastes, food wastes, plastics, leather, rubber, and other combustible materials and non-combustible materials such as metal, glass and rock, provided that: (1) the term does not include industrial process wastes or medical wastes that are segregated from such other wastes; and (2) an incineration unit shall not be considered to be combusting municipal solid waste for purposes of this subpart if it combusts a fuel feed stream, 30 percent or less of the weight of which is comprised, in aggregate, of municipal solid waste, as determined by §60.2887(b).

Refuse-derived fuel means a type of municipal solid waste produced by processing municipal solid waste through shredding and size classification. This includes all classes of refuse-derived fuel including two fuels:

With the “does not include industrial process waste” term in the definition of MSW under OSWI, I am not sure we would call this a VSMWC if they used **material generated at their reinforced plastics manufacturing plant** to be the 30% MSW. But what if they just collected some real MSW from some other entity to make this exemption stick?

Or is the domestic sewage sludge a MSW?

I do not see domestic sewage sludge clearly addressed in the definition of MSW under OSWI, but I guess collected from the general public and from residential, commercial, institutional, and industrial sources could cover it.

Or, would we just then say that by having the exemption out of OSWI they are not subject to OSWI therefore the exemption (§60.2020 (o)) from CISWI would not apply and CISWI would stick.

They have described this other ‘no more than 30% portion’ as MSW, as would also be required for the OSWI exemption to apply, but, again would the other material even be MSW?

They state:

Janicki has the ability to generate an auxiliary fuel stream that is **refused derived from scrap material generated at their reinforced plastics manufacturing plant** located in Sedro Woolley

Under CISWI it looks like it would not be MSW

Municipal solid waste or municipal-type solid waste means household, commercial/retail, or institutional waste. Household waste includes material discarded by residential dwellings, hotels, motels, and other similar permanent or temporary housing. Commercial/retail waste includes material discarded by stores, offices, restaurants, warehouses, **nonmanufacturing activities at industrial facilities**, and other similar establishments or facilities. Institutional waste includes materials discarded by schools, by hospitals (nonmedical), by nonmanufacturing activities at prisons and government facilities, and other similar establishments or facilities. Household, commercial/retail, and institutional waste does include yard waste and refuse-derived fuel. Household, commercial/retail, and institutional waste does not include used oil; sewage sludge; wood pallets; construction, renovation, and demolition wastes (which include railroad ties and telephone poles); clean wood; industrial process or manufacturing wastes; medical waste; or motor vehicles (including motor vehicle parts or vehicle fluff).

But under OSWI, where the exemption this would be relevant for is housed, we may consider this to be MSW because it does say material collected from commercial and industrial sources. But maybe not, I am not sure if the term "industrial process waste" would capture this material (**scrap material generated at their reinforced plastics manufacturing plant**).

Municipal solid waste means refuse (and refuse-derived fuel) collected from the general public and from residential, commercial, institutional, and industrial sources consisting of paper, wood, yard wastes, food wastes, plastics, leather, rubber, and other combustible materials and non-combustible materials such as metal, glass and rock, provided that: (1) the term does not include industrial process wastes or medical wastes that are segregated from such other wastes; and (2) an incineration unit shall not be considered to be combusting municipal solid waste for purposes of this subpart if it combusts a fuel feed stream, 30 percent or less of the weight of which is comprised, in aggregate, of municipal solid waste, as determined by §60.2887(b).

Then we also have the question of: Is the material "collected from" if it is their own facility where it is generated, even if the generating facility is located somewhere different from the incinerator.

Again what if they just collected some real MSW from some other entity to make this exemption stick?

Does this then equal a loop hole out of CISWI and OSWI?

If NSPS Subpart O is really getting units that burn enough domestic sewage sludge to trigger NSPS Subpart O (while not locate at a municipal waste water treatment plant) out of CISWI, would the intent be that these commercially located domestic sewage sludge burners be regulated under OSWI? But do we just not have an OSWI category for this situation yet?

I would love to have your thought on this as soon as you can get to it. Always the clever sources looking for a way out in R10, it is like one of those logic games you did as a kid :)

Heather Valdez

12/26

Good Afternoon Heather –

Per our discussion this morning, please find attached a draft applicability analysis for the proposed Janicki Omni Processor project.

The NWCAA has already approved operation of the Janicki Omni Processor fired on clean wood with supplemental firing on propane, and the unit is currently under construction. Janicki has voiced an interest in combusting a more diverse fuel stream that includes sewage sludge from their local municipal wastewater treatment plant and with a minor portion of the fuel being refused derived fuel. In an effort to facilitate this under minor new source review it is important that the NWCAA clearly understand the applicability of federal regulations as it pertains to this project. Therefore, any clarifications that you can provide in this matter are greatly appreciated.

Specifically,

1. Is the unit exempt from 40 CFR 60 Subpart CCCC because it is subject to Subpart O, and
2. Is the unit exempt from 40 CFR 60 Subpart EEEE if the NWCAA issues a federally enforceable permit that limits refused derived fuel to less than 30% by weight.

Thank you in advance for your reply.

Sincerely,



Janicki Omni
Processor - DRA...

- Dan

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New Source Review Lead

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